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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/114,203 07/13/98 MIYANISHI

A 030682-066

021839 MM91/0308
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EXAMINER

RAIMEISTER, R

ART UNIT

PAPER NUMBER

2815

DATE MAILED:

03/08/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/114,203

Applicant(s)
Miyanishi et al.

Examiner
William Baumeister

Group Art Unit
2815



☒ Responsive to communication(s) filed on Dec 11, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-12 is/are pending in the application.

Of the above, claim(s) 2-11 is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1 and 12 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
 2. Claims 1 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jassowski '389. As was explained in the previous Office Action (paper #10 dated 8/4/2000) Jassowski teaches isolated active regions having depressed regions with various gate lines extending across the ordinary and depressed regions and terminating in gate end caps. The end caps have margins of various lengths, some appearing to have approximately equal lengths "x" (see e.g., gates numbered 2 and 3 by applicant) and some appearing to have the length of "x" and "x + a" (see e.g., gates numbered 1 and 2 by applicant). Jassowski does not disclose the newly added limitation relating to the respective lengths of the margins (i.e. x and x + a, respectively, where $0 < a \leq x$).
- a. Nonetheless, it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or working ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Thus, given that end cap margins of varying lengths are known, it would have been obvious to one of ordinary skill in the art at the invention to form the various end caps such that their respective margins satisfy the stated equation's relationship, the specific lengths ultimately chosen being dependent only upon conventional and well known

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considerations. For example, the widths of the various portions of the active region and the depth of the depression between the regions are a function of the specific devices desired (longer active-region channel lengths reduce resistance), and the specific arrangement of the active regions is commonly determined by the underlying goal of minimizing chip space. Similarly, the specific margin lengths ultimately chosen will also be determined by conventional considerations such as the simplification of the mask design and chip space requirements.

Response to Arguments

3. Applicant's arguments filed 12/11/2000 have been fully considered but they are moot in light of the new grounds of rejection.
4. As claims 1 and 12 have been rejected, the issue of rejoinder of any other claims is moot.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - a. WO 94/29898 is directed towards means of realizing end cap margins having more squared ends to reduce current leakage. FIG. 5B depicts two end caps that extend over the FOX region by differing lengths.

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INFORMATION ON HOW TO CONTACT THE USPTO

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to the examiner, **B. William Baumeister**, at **(703) 306-9165**. The examiner can normally be reached Monday through Friday, 8:30 a.m. to 5:00 p.m. If the Examiner is not available, the Examiner's supervisor, Mr. Eddie Lee, can be reached at (703) 308-1690. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

B. William Baumeister

March 5, 2001



**EDDIE C. LEE
PRIMARY EXAMINER**